Technical Data Sheet

HYDROTHANE TR2

Two Component Polyurethane Based Tar Extended Liquid Applied Waterproofing Membrane

Description:

HYDROTHANE TR2 is a two component, chemically cured, high build liquid elastomeric waterproofing membrane based on Polyurethane resins modified with coal tar for extra elasticity and harsh environments.

HYDROTHANE TR2 has excellent adhesion to most substrates including concrete, plaster, masonry, bituminous roofing felts, metal and asphalt coatings. Once dry, it cures to form a seamless continuous monolithic membrane that has excellent adhesion to most substrates with extra flexibility and high resistance to chemicals.

HYDROTHANE TR2 is recommended for waterproofing application where high flexibility and chemical resistance is required at building structures including foundations, kitchen and toilet floors, and industrial wet processing areas.

Applications:

- Wet areas; showers, bathrooms, kitchens, balconies, planters, pools, especially in public used utilities.
- Water proofing concrete panels with potential of movement.
- Roofing and corrugated sheets waterproofing.
- Cement pipes and metal.
- Water proofing at meat and poultry factories.
- Water proofing membrane at food processing areas.
- Bridges, basements, retaining walls.
- Highly compatible in sewage works, waste water channels and pipes due to its chemical resistance features.

Advantages:

- High build liquid applied membrane in single application.
- Highly flexible 600% to be applied where movement is expected, without the risk of cracking.
- Self-priming, requires no primer to adhere to substrate.
- Vapor permeable allows substrate to breathe.
- Chemical resistant to detergents, cleaning material, brackish water and salt water.
- Easy applied with excellent workability by manual tools.
- Easy to repair damaged coats.
- High thermal stability. Suitable for Middle East climate.
- Excellent adhesion to most types of substrates.

Instructions for Use:

Surface Preparation:
All surfaces should be sound, clean, dry and free from loose material, efflorescence, laitance, curing compounds, dirt, oil and grease. Ensure that concrete surfaces are fully cured before application.

All shrinkages and nonmoving structural cracks under 1.0 mm shall be filled with not less than 1.0 mm thick pretreatment strip of HYDROTHANE TR2 extended to 50 mm on both sides of the crack.

For parapet walls, columns, make a 45° coving fillet at all corners using LAVAREP F40. Apply a reinforcing pretreatment strip of HYDROTHANE TR2 1.0 mm thick extending 100mm on both sides of the coving. Voids and honeycombs must be patched with concrete repair products. Allow the patched area to cure before applying the liquid membrane forming coating.

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Metal surfaces should be cleaned from rust, oil, paint or any contaminants. For rusted surfaces use mechanical method, or sandblast for removing the rust.

In normal cases, priming is not needed. However, porous surfaces requires priming to reduce the risk of blisters caused by air entrapments. Dilute HYDROTHANE TR2 with solvent and use as a primer.

Primer can also be used for application of new coat on top of old ones.

Expansion and movement joints should not be covered with a coat of HYDROTHANE TR2. Instead, those joints should be sealed with MEGASEAL PU, polyurethane sealant.

Mixing:
HYDROTHANE TR2 is composed of two components that must be mixed at the time of use. Mix the contents of component A (Base) with a low speed mixer for one minute to homogenize the content of the container. Slowly add the entire contents of part B (Hardener) to Part A container and mix thoroughly the material with low speed mixer (200-300 rpm) fitted with suitable paddle, for an interval of 3-4 minutes.

Application:
HYDROTHANE TR2 can be applied with a roller, trowel, brush or spray machine. It is recommended to apply two coats in case of roller or brush applications. Apply rich coat to the surface in a spread rate of 0.8 kg/m² per coat. Subsequent coats to be applied to the first coat with same rate of application preferably in 90 degree direction.

Do not leave the product exposed for elongated periods, as mechanical damages might occur to the monolithic membrane. Apply protection sheets to ensure proper coverage. If the product to be totally exposed to sun and atmosphere, apply a UV protective layer on top of the membrane after curing.

HYDROTHANE TR2 can be applied by brush, roller, trowel or by airless spray machine. It is recommended to apply two coats to achieve a minimum 1.0 mm dry film thickness. Second coat should be applied at right angle to the first coat once it is completely dry.

Do not allow first coat to be exposed for long periods of time, in order not to eliminate the chance of membrane damage or contamination. It is recommended to cover the first coat once it is completely cured by mortar, tiles or any finishing product as specified.

Do not apply tiles adhesive to HYDROTHANE TR2 membrane while the coat is still uncured. To provide a good mechanical bonding between tiles and the membrane, by spreading the final coat of HYDROTHANE TR2 with silica sand while it is still wet.

Standards:

HYDROTHANE TR2 conforms to:
- ASTM D2240, ASTM C836,ASTM D412,ASTM D624

TECHNICAL PROPERTIES		
Color	:	Black
Density	:	1.30 kg/m³
Pot Life	:	45 minutes @ 25°C
Solid Contents	:	100%
Touch dry	:	10 hours
Full Dry	:	7 days
Water vapor trans.	:	0.28 g/h/m²
Adhesion to concrete	:	2.0 N/mm²
Shore A hardiness	:	50
Tensile Strength	:	1.5 N/mm²
Tear Resistance	:	15 N
Elongation	:	640%
Water penetration Service	:	NIL
Temperature	:	10 to 75°C
100% Modulus of elasticity	:	0.64 N/mm²
Chemical Properties	:	Good Resistance against acidic and alkali solutions, detergents, seawater, brackish water and oils.
Crack Bridging	:	Up to 6mm

Packaging:

HYDROTHANE TR2 is available in 4 liter and 15 liter set of two parts metallic containers.

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Storage:

HYDROTHANE TR2 to be stored in original packing in dry conditions away from direct sunlight and high humidity levels.

Coverage:

HYDROTHANE TR2 achieves coverage of 1.4 kg per 1 m² @ 1.0 mm dry film thickness.

Shelf Life:

HYDROTHANE TR2 can be utilized within 12 months of production date if stored in proper conditions in unopened original packing.

Cleaning:

Clean all tools with solvent before product hardens.

Remarks:

- For external application, do not apply the product in rainy weather.
- HYDROTHANE TR2 should not be applied on surfaces with a risk of rising dampness.
- Water test should be applied after the final coat is totally cured.
- During summer season, working area should be covered to prevent direct sunlight.

Health and Safety:

- Use goggles and gloves during application. Do not breathe the vapor of the product. Use only in well ventilated areas.
- Avoid contact with eyes or skin.
- In case of eyes contact, clean immediately with plenty of clean water and seek medical care.

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This technical data sheet is not considered as local building codes. It shall be used as general reference for the product, based on our current knowledge and experience. However the company do not accept any liability arising from the use of its products as it has no direct control on how and where the product is applied.

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